# NATURAL RESOURCES CONSERVATION SERVICE Wyoming CONSTRUCTION SPECIFICATIONS FOR IRRIGATION SYSTEM SPRINKLER

(Owner/Operator) (Project/Title)

### **GENERAL**

Irrigation sprinkler systems shall be installed in accordance with a design and plan approved by the responsible technician. Details of construction shown in the design and plan but not included here shall be considered as a part of this specification. Construction activities shall be in accordance with applicable OSHA regulations.

## **MAINLINES**

The mainline materials and installation shall meet the requirements of Idaho Construction Specification for Irrigation Pipelines for the respective pipe material or materials specified.

### LATERAL LINES

The mainline riser spacing, lateral lines and/or pivot line and nozzles shall be of the size, type, pressure rating and spacing as shown on the design. When a uniformity coefficient is specified in the design, the combination of sprinkler spacing, nozzle size and operating pressure shall be evaluated to see that the selected equipment meets or exceeds the specified uniformity coefficient. When a uniformity coefficient is not specified the sprinkler performance data shall be evaluated to see that required spacing criteria is met.

Valves, fittings, vents, nozzles, etc., shall be of suitable size, type and capacity to provide efficient operation and keep pressures in the system within allowable working limits. An in line check valve or other anti-pollution device shall be installed on sprinkler systems in which any fertilizer, pesticide or animal waste is injected into the system.

## PUMP AND POWER UNIT

The pump or combination of pumps shall be capable of delivering the water capacity at the total dynamic head as specified on the drawings. The power unit shall be capable of operating the pump at maximum capacity and head without being in an overload condition. The pump and power unit shall be in accordance with manufacturer's recommendations.

All electrical wiring and equipment shall be in accordance with the current standards of the National Electrical Manufacturers Association (NEMA), the Underwriters Laboratory, Inc. (UL), and the State of Wyoming Regulations.

## PUMPING PLANT

The pumping plant as specified on the drawings shall meet the requirements of Wyoming Construction Specification WY-533 Pumping Plant for Water Control. TESTING

The system shall be given an operational test. This test shall consist of normal start-stop and running operations. All of the system components shall operate without difficulty. Leakage or defects caused by

# WY-442

poor materials or workmanship shall be corrected by the Contractor.

ADDITIONAL SPECIFICATIONS